

## U.S. Department of Justice

## **Antitrust Division**

Office of the Assistant Attorney General

Washington, D.C. 20530

September 2, 1992

Michael I. Miller, Esquire Sidley & Austin One First National Plaza Chicago, Illinois 60603

Re: Business Review Request: Advanced Reactor Corporation

Dear Mr. Miller:

This letter responds to your request, on behalf of Advanced Reactor Corporation ("ARC"), for the issuance of a business review letter pursuant to the Department of Justice's business review procedure, 28 C.F.R. § 50.6. You have requested a statement of the Antitrust Division's current enforcement intentions with respect to the proposed joint venture to support research and development of standardized designs for nuclear power plants. Based on the information you have provided, the Department has no present intention to challenge the proposed joint venture.

ARC is a non-profit membership corporation. Its members include 16 electric utilities, the United States Department of Energy ("DOE"), and the Electric Power Research Institute ("EPRI"). ARC's Board of Directors consists of 16 voting directors, one from each member utility, as well as the DOE and EPRI as non-voting directors. The Board of Directors will be responsible for coordination with DOE on the proposed research and development project, but will delegate to the Project Management Board ("PMB") all policy and financial issues related to specific projects of the proposed joint venture, subject to the Board's approval.

ARC's proposed research will be conducted under the terms of a cooperative agreement with the DOE ("DOE Agreement"). ARC's proposed joint venture will promote the development of standardized designs for a new generation of nuclear power

plants known as Advanced Light Water Reactors ("ALWR's"), through a process that is termed First of a Kind Engineering ("FOAKE").

Under the DOE Agreement, the DOE will be involved in all phases of the FOAKE process. DOE's responsibilities include concurring with the appointment of key project personnel and changes in the management structure, participating in the review and approval process throughout the ALWR-FOAKE project, co-chairing an ARC/DOE Oversight Group, and participating on a non-voting basis in the PMB and Utility Sponsor Groups. DOE has also offered \$100 million in matching funds.

ARC claims that the development of standardized designs will significantly shorten the average construction and approval time for ALWR nuclear plants, reduce construction costs, as well as provide more predictability to construction costs and schedules. ARC also believes that by proposing standardized nuclear plant designs, rather than having customized designs for proposed plants, utilities will more easily achieve regulatory approvals. ARC further claims that without this joint venture and the support of the DOE, no utilities, including ARC's members, would independently undertake the development of standardized ALWR designs. ARC cites the fact that no nuclear power plants have been ordered in the past 15 years as evidence of the need for joint action.

ARC's proposed FOAKE development process consists of three phases: (1) gathering information on criteria for evaluating standardized designs, cost estimates, and regulatory compliance; (2) selecting at least two standardized designs; and (3) producing detailed engineering plans for the selected designs.

To date, four standardized ALWR designs have been presented to ARC to be considered for funding. It is unlikely that any other designs will be presented to ARC in time to be considered in the FOAKE development process. Two of the designs, the General Electric ABWR and the ASEA Brown Boveri/Combustion Engineering ("ABB/CE") System 80 Plus, are evolutionary nuclear plants of approximately 1200 MWes. The other two designs, the Westinghouse AP600 and the General Electric SBWR, are passive designs of approximately 600 MWes. ARC anticipates choosing at least one passive design and at least one evolutionary design. ARC expects the evolutionary designs to obtain NRC certification as early as 1993 and the passive designs to obtain certification as early as 1995.

The first phase of the ALWR-FOAKE design research project will be managed by the PMB and is intended to set the proposed bidding criteria. Phase I involves developing information on costs, technical licensing risks, compliance with Nuclear Regulatory Commission's ALWR Utility Requirements Documents,

requirements for infrastructure necessary to support the standardized designs, interim performance milestones, and definition of the design activities, selection process, and oversight structure to be used in the later stages of the process. No Class I member or subsidiary or affiliate of a Class I member will serve as contractor or subcontractor in this stage.

The second phase is aimed at selecting at least two During this phase, the PMB will set up standardized designs. separate evaluation panels to solicit and consider bids for each ALWR design. Each evaluation panel will consist of a subgroup of utility representatives drawn from the PMB whose companies wish to support the development of FOAKE for that design during The DOE and EPRI will have non-voting members on each evaluation panel. Selection of the standardized designs will be accomplished by a blind voting process, with the voting power of each ARC member weighted according to the level of financial support that member has agreed to contribute. According to ARC's voting rules, no communication will be allowed between utilities regarding the voting process or preferences from the time the voting documents are sent out until the final selections are made.

The third and final phase will complete the FOAKE development process. In this phase, ARC will establish Utility Sponsor Groups that would be responsible for establishing direction for each of the ALWR-FOAKE designs selected. Each sponsor group will consist of a senior representative from each ARC member that contributes to the development of that design. If an ARC member splits its funding over more than one winning design, it may place members on the Utility Sponsor Group for each of the designs that it plans to fund. Non-voting representatives from EPRI, the DOE and the nuclear plant designer organization will also be members of the Utility Sponsor Groups. No contractor or subcontractor performing work in Phases 1 or 2 in which Federal funds were used will be allowed to perform work as a contractor or subcontractor in Phase 3 unless the PMB (or a special committee from the PMB if necessary due to a conflict of interest involving a member of the PMB) and the DOE agree that there is no organizational conflict of interest or that the contractor or subcontractor has taken sufficient steps to mitigate or eliminate the conflict of interest.

ARC will be the owner of all intellectual property of whatever form generated by the FOAKE development process. This intellectual property could include patentable inventions, copyrightable data, and computer programs. If this intellectual property has independent value apart from the designs selected property has end phase, then ARC may receive royalties from it. As required by the DOE Agreement and pursuant to the agreements

negotiated with the winning designers after the second phase, ARC will license the FOAKE development technology to these winning designers.

Under the DOE agreement, the DOE and EPRI also will have certain rights in the FOAKE-generated intellectual property. The DOE and EPRI will have the right to use any FOAKE-generated intellectual property without having to pay royalties. The DOE will also have march-in rights to require ARC to license FOAKE technology to responsible applicants under reasonable terms if, for example, ARC has been slow to commercialize the technology or if DOE concludes that such action is necessary for health or safety needs. In addition, DOE may release certain technical data after five years and retains the right to require ARC to license FOAKE technology to applicants.

The Department has evaluated ARC's proposed ALWR-FOAKE research and development joint venture under a rule-of-reason standard. As a threshold matter, the Department has no reason to believe that the venture is a sham or was formed for an improper purpose. In evaluating the impact of the joint venture on competition the Department considered primary and secondary markets. First, the Department considered whether the joint venture would have any anticompetitive effect in the primary market, which is FOAKE-type designs that satisfy U.S. licensing requirements. Second, the Department considered whether the joint venture would have any anticompetitive effects in any other markets, including the markets for electricity generation and architectures and engineering ("A&E") services.

ARC's proposed ALWR joint venture does not appear to adversely effect the primary market for research and development of U.S. ALWR-FOAKE technology, such as, by stifling innovation. The research to be conducted in this proposed joint venture is relatively expensive, and the ability to market the relevant product, the FOAKE designs, is uncertain. Consequently, it is unlikely that any utilities including the ARC members would independently undertake that level of risk to enter a market in which they do not now compete. Therefore, it appears unlikely that the ARC firms would enter the market without the joint venture and the DOE matching funds. For this reason, ARC's proposed joint venture promotes innovation and supplies competitors to the ALWR technology market, thereby encouraging the development of a new product.

Similarly, ARC's proposed joint venture does not appear to adversely affect any other market in which its members compete. Although all members of ARC are utilities and compete to some limited degree in the electricity generation market, it does not appear that the ARC joint venture could be used directly or indirectly to stabilize or fix prices. First, there do not appear to be any ancillary restraints imposed on the ARC members

which would restrict competition in the electricity generation markets. Second, the ability or inability to access FOAKE technology is not likely to affect the ability of utilities to compete in electricity markets because other existing electric generation technologies account for a very high share of the supply of electricity. Moreover, if access to FOAKE technology were ever to become important to competition in electricity generation sales, pursuant to the DOE agreement, the DOE has the authority to require that ARC license the FOAKE technology to non-ARC utilities at a reasonable price. Furthermore, ARC's proposed joint venture does not appear to adversely effect the A&E services market because ARC members have agreed among themselves to include selection procedures to prevent biasing selection in favor of members who have A&E affiliates.

Based upon the information currently available to us, ARC's proposed ALWR-FOAKE joint venture appears to offer the possibility of accelerating the expensive and commercially risky process of developing designs for the next generation of nuclear power plants. On the other hand, the proposed venture appears to impose no significant countervailing anticompetitive effects. Accordingly, the Department of Justice has no present intention to challenge the proposed joint venture.

This letter expresses the Department's current enforcement intention only. In accordance with our normal practice, however, the Department remains free to bring an enforcement action in the future if actual operation of any aspect of the joint venture proves anticompetitive in purpose or effect.

This statement of the Department's enforcement intentions is made in accordance with the Department's Business Review Procedure, 28 C.F.R. § 50.6, a copy of which is enclosed. Pursuant to its terms, your business review request and this letter will be made available to the public within 30 days of the date of this letter unless you request that part of the material be withheld in accordance with Paragraph 10(c) of the Business Review Procedure.

Sincerely,

 $\int \int$ J. Mark Gidley

Acting Assistant Attorney Gen